Quoc-Viet Pham

Personal Data

Place and Date of Birth:	Hai Duong, Vietnam	05 April 1990
Address:	310-2, ABC Center, Pusan National University, Yangsan Campus, 50612 Korea
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Education

Aug. 2017 Doctor of Engineering in Telecommunications, **Inje University**, Kimhae, Korea
Thesis: "Fair and Energy-Efficient Resource Allocation Optimization in Wireless Networks"
Advisor: Prof. Won-Joo Hwang
GPA: 4.39/4.50
Prize: Best Ph.D. Dissertation, Ranking #1 in Engineering

Aug. 2015 Master of Science in Telecommunications, **Inje University**, Kimhae, Korea
Thesis: "Multi-Timescale Cross-Layer Design in Wireless Multihop Networks"
Advisor: Prof. Won-Joo Hwang
GPA: 4.50/4.50

Aug. 2013 Bachelor of Science in Electronics and Telecommunications,
Hanoi University of Science and Technology, Hanoi, Vietnam
Thesis: "Building an Observational Data Processing and Archiving Center for Automatic
Water Level Gathering and Alarming System" (in Vietnamese)
Advisor: Prof. Van-Duc Nguyen
GPA: 3.08/4.00

Work Experience

Jan. 2020 - Current Research Professor,
Korean Southeast Center for the 4th Industrial Revolution Leader Education,
Pusan National University, Korea

Mar. 2018 - Dec. 2019 Research Professor,
ICT Convergence Center, Changwon National University/Inje University, Korea

Sep. 2017 - Feb. 2018 Post-Doctoral Research Fellow,
Dept. Computer Science and Engineering, Kyung Hee University, Korea

Sep. 2013 - Jun. 2017 Research Assistant, Wireless Networks (WINE) laboratory,
Dept. Information and Communication System, Inje University, Korea

Visiting Experience

Jan. 2016- Feb. 2016 Tokyo University of Science, Japan, Prof. Mikio Hasegawa

Aug. 2019 - Aug. 2019 Tokyo University of Science, Japan, Prof. Mikio Hasegawa

Grants and Projects

2019 - 2024	**NRF Basic Science and Research** (500,000,000 KRW), Principal Investigator Grant NRF-2019R1C1C1006143 Title: *Privacy Enhancing Connected Cars in 5G and Beyond*
2022 - 2024	**FDCRGP Grant** ($136,000, 3 years) Co-Principal Investigator Title: *Edge-assisted Activity Recognition using Skeletal Representation and DL for Video Surveillance*
2019 - 2022	**NRF Basic Science and Research** (100,000,000 KRW/year, up to 5 years) Key Participant, Grant NRF-2019R1I1A3A01060518 Title: *Edge Computing in the 5G Ecosystem: Joint 4C Framework and Its Applications*
2018 - 2019	**NRF Basic Science and Research** (25,000,000 KRW), Key Participant Project in collaboration with the Australian side (Grant NRF-2018K2A9A1A01090540) Title: *Low Overhead Channel Access for 5G Mobile Communications in Large-Scale IoT Networks*
2020 - 2027	**Brain Korea (BK) 21** (549,825,000 KRW/year), Participant Korean Southeast Center for the 4th Industrial Revolution Leader Education, Pusan National University

Awards and Recognition

- BKACAD certificate of CCNA course, 2012.

- University scholarship for excellent students, HUST, 2010-2013.

- Prize for excellent students, Vietnamese Students' Association in Korea (VSAK), 2015.

- Best paper award, KMMS 2014, JKCCS 2016, KJCCS 2020, KICS 2021.

- Leadership and scientific publication scholarship, Inje University, 2015-2016.

- Best Ph.D. dissertation, Inje University, Spring 2017.

- Top reviewer award, IEEE Transactions on Vehicular Technology, 2020.

- Top 2% of scientists on Stanford University list, 2021.

- Award for outstanding contributions and research excellence, Minister of Education (Korea), 2021.

- Golden globe award 2021 for Vietnamese young scientists, Ministry of Science and Technology, 2021.

Mentoring and Teaching Experience

Teaching Courses, Inje University

1. Network Optimization

2. Game Theory

3. Machine Learning in Wireless and Communication Networks

Teaching assistant, Inje University

1. Introduction to Android Programming, Fall semester 2016.

2. Data and Computer Communications, 2016-2017 (3 semesters).

Mentoring assistant, Hanoi University of Science and Technology

1. Project II (a course for 4th-year undergraduate student), Fall 2012.

Supervision

Doctoral Students

- Le Thi Mai [PNU, 2021/3-Present] - *Topic*: Wireless AI and aerial access networks.

- Nguyen Minh Duong [PNU, 2020/9-Present] - *Topic*: DRL for 6G resource optimization

- Swe Swe Latt [PNU, 2020/9-Present] - *Topic*: federated learning and 6G resource optimization

- Dao Thien Thanh [PNU, 2020/9-Present] - *Topic*: deep learning and depth map

- Nadia Iradukunda [Inje University, 2019/9-Present] - *Topic*: UAV communications in 5G and beyond

Master Students

- Daeil Noh [PNU, 2020/9-Present] - *Topic*: Deep learning for amateur UAV recognition

- Sang Min Lee [PNU, 2020/9-Present] - *Topic*: Communication-efficient federated learning

Alumnus

- Le Thi Mai [MS, Inje University, 2019/3-2021/2] - *Topic*: swarm intelligence for D2D communications

- Hoang Huu Trung [Ph.D., Inje University, 2018/9-2021/2] - *Topic*: ML for mmWave communications

- Vo Ta Hoang [Ph.D., Inje University, 2017/9-2020/2] - *Topic*: resource allocation for MEC systems

- Nguyen Tien Hoang [MS, Inje University, 2017/9-2019/8] - *Topic*: coalitional games for NOMA-MEC

- Maurice Nduwayezu [MS, Inje University, 2017/9-2019/8] - *Topic*: DRL for NOMA-MEC offloading

- Girmay Gebremariam [MS, Inje University, 2017/9-2019/8] - *Topic*: swarm intelligence for D2D communications with unlicensed spectrum

- Akmal Azizan [MS, Inje University, 2017/9-2019/8] - *Topic*: blockchain for healthcare applications

Professional Activities

Editors

- Journal of Network and Computer Applications [Elsevier, Q1, IF 6.281, 2020-Present]

- IEEE Internet of Things Journal [Lead Guest Editor, Aerial Computing for the Internet-of-Things (IoT), 2021-2022]

- Frontiers in Communications and Networks [Associate Editor, 2020-Present]

- Frontiers in Communications and Networks [Guest Editor, Communication Efficient Edge Learning for Unmanned Aerial Vehicle Networks, 2021]

- Sensors [Guest Editor, Security and Privacy in the Internet of Things (IoT), 2021]

Invited Referee for Journals

- **Letters**: IEEE COMML, IEEE WCL.

- **Transactions**: IEEE TCOM, IEEE TWC, IEEE TVT, IEEE TMC, IEEE TSC, IEEE TPDS, IEEE TCSS, IEEE JSAC, IEEE TGCN, IEEE TSIPN, IEEE IoTJ.

- **Magazines**: IEEE CommMag, IEEE WCM, IEEE CSM, IEEE VTM, IEEE CIM.

- **Other Journals**: ACM CSUR, IEEE SJ, IEEE Access, ComNet, ETT, EURASIP JWCN, IJDSN, Sensors.

Technical Program Committee

- **2022**: IEEE ICC

- **2021**: IEEE VTC2021-Fall, IEEE ISC2, EAI Qshine, FICTA, IEEE GLOBECOM.

- **2020**: ICCIS, IEEE WCNC, IEEE ICC, IEEE VTC2020-Spring, IEEE STP-CPS-SECON.

TPC Chair/Track Chair

- **2022**: EAI GameNets 2022 (11th EAI International Conference on Game Theory for Networks), ICIT 2022 (The First International Conference on Intelligence of Things), SoICT 2022 (11th International Symposium on Information and Communication Technology)

Administrator

- telecom-vn: 127.0.0.1 of Vietnamese Telecomian Community

Fields of Research Interest

- Edge computing and edge learning

- Wireless AI and resource optimization

- AI and ML for future network systems

Publications

Books

[1] C. de Alwis, **Q.-V. Pham**, P. Kumar, and M. Liyanage, *6G Frontiers: New Technologies, Applications, and Standardization Approaches*, Wiley-IEEE Press, expected 2022 (book proposal approved).

Book Chapters

[1] N.-N. Dao, N.-T. Dinh, **Q.-V. Pham**, T. V. Phan, S. Cho, and T. Braun, "Vulnerabilities in Fog/Edge Computing from Architectural Perspectives," Chapter 11, in *Fog/Edge Computing For Security, Privacy, and Applications*, Wu J and Chang W, Springer, 2021 [Eds].

[2] **Q.-V. Pham**, D. C. Nguyen, T. Huynh-The, W.-J. Hwang, and P. N. Pathirana, "Artificial Intelligence and Big Data for COVID-19 and Social Distancing," Chapter 5, in *Enabling Technologies for Social Distancing: Fundamentals, concepts and solutions*, IET, expected 2022 [Eds].

[3] D. C. Nguyen, **Q.-V. Pham**, M. Ding, P. N. Pathirana, and A. Seneviratne, "Security and Privacy and Blockchain Applications in COVID-19 Detection and Social Distancing," Chapter 7, in *Enabling Technologies for Social Distancing: Fundamentals, concepts and solutions*, IET, expected 2022 [Eds].

Preprints and Under Review

[1] T.-H. Vu, T.-V. Nguyen, **Q.-V. Pham**, D. B. da Costa, and S. Kim, "UAV-Aided Short-Packet NOMA Networks with Imperfect CSI and SIC," under review, *IEEE Internet of Things Journal*.

[2] Y. M. Saputra, D. N. Nguyen, H. T. Dinh, **Q.-V. Pham**, E. Dutkiewicz, and W.-J. Hwang, "Federated Learning Framework with Straggling Mitigation and Privacy-Awareness for AI-based Mobile Application Services," under review, *IEEE Transactions on Mobile Computing*.

[3] **Q.-V. Pham**, R. Ruby, F. Fang, D. C. Nguyen, Z. Yang, M. Le, Z. Ding, and W.-J. Hwang, "Aerial Computing: A New Computing Paradigm, Applications, and Challenges," under review, *IEEE Internet of Things Journal*.

[4] H. Dang-Ngoc, D. N. Nguyen, K. Ho-Van, H. T. Dinh, E. Dutkiewicz, **Q.-V. Pham**, and W.-J. Hwang, "Secure Swarm UAV-assisted Communications with Cooperative Friendly Jamming," under review, *IEEE Internet of Things Journal*.

[5] T. Huynh-The, T.-V. Nguyen, **Q.-V. Pham**, D. B. da Costa, and D.-S. Kim, "MIMO-OFDM Modulation Classification Using Three-Dimensional Convolutional Network," under revision, *IEEE Transactions on Vehicular Technology*.

[6] M.-D. Nguyen, S.-M. Lee, **Q.-V. Pham**, H. T. Dinh, D. N. Nguyen, and W.-J. Hwang, "HCFL: A High Compression Approach for Communication-Efficient Federated Learning in Very Large-Scale IoT Networks," under revision, *IEEE Transactions on Mobile Computing*.

[7] **Q.-V. Pham**, M. Le, T. Huynh-The, Z. Han, and W.-J. Hwang, "Energy-Efficient Federated Learning over UAV-enabled Wireless Powered Communications," under revision, *IEEE Transactions on Vehicular Technology*.

[8] T. Huynh-The, T.-V. Nguyen, **Q.-V. Pham**, V.-S. Doan, D. B. da Costa, and D.-S. Kim, "Efficient Convolutional Networks for Robust Automatic Modulation Classification in OFDM-Based Wireless Systems," under review, *IEEE Systems Journals*.

[9] T. Huynh-The, **Q.-V. Pham**, T.-V. Nguyen, D. B. da Costa, and D.-S. Kim, "High-Performance Convolutional Network for RF-Based Drone Surveillance," under review, *IEEE Systems Journals*.

[10] T. R. Gadekallu, **Q.-V. Pham**, T. Huynh-The, S. Bhattacharya, P. K. R. Maddikunta, and M. Liyanage, "Federated Learning for Big Data: A Survey on Opportunities, Applications, and Future Directions," under review, *ACM Computing Surveys*.

[11] C. T. Nguyen, N. V. Huynh, N. H. Chu, Y. M. Saputra, H. T. Dinh, D. N. Nguyen, **Q.-V. Pham**, D. Niyato, E. Dutkiewicz, and W.-J. Hwang, "Transfer Learning for Wireless Networks: A Comprehensive Survey" under review, *Proceedings of the IEEE*.

[12] M. Zeng, E. Bedeer, X. Li, **Q.-V. Pham**, O. A. Dobre, P. Fortier, and L. A. Rusch, "IRS-Empowered Wireless Communications: State-of-the-Art, Key Techniques, and Open Issues," under review, *IEEE Network*.

[13] **Q.-V. Pham**, M. Zeng, T. Huynh-The, Z. Han, and W.-J. Hwang, "Aerial Access Networks for Federated Learning: Applications and Challenges," under minor revision, *IEEE Network*.

[14] Parimala M, Swarna Priya R M, **Q.-V. Pham**, K. Dev, P. K. R. Maddikunta, T. R. Gadekallu, and T. Huynh-The, "Fusion of Federated Learning and Industrial Internet of Things: A Survey," under review, *Future Generation Computer Systems*.

[15] B. Prabadevi, **Q.-V. Pham**, M. Liyanage, N. Deepa, Mounik VVSS, S. Reddy, P. K. R. Maddikunta, N. Khare, T. R. Gadekallu, and W.-J. Hwang, "Deep Learning for Intelligent Demand Response and Smart Grids: A Comprehensive Survey," under review, *Computer Science Review*.

[16] N. Deepa, **Q.-V. Pham**, D. C. Nguyen, S. Bhattacharya, B. Prabadevi, T. R. Gadekallu, P. K. R. Maddikunta, F. Fang, and P. N. Pathirana, "A Survey on Blockchain for Big Data: Approaches, Opportunities, and Future Directions," under major revision, *Future Generation Computer Systems*.

[17] S. A. Khowaja, K. Dev, P. Khuwaja, **Q.-V. Pham**, N. M. F. Qureshi, P. Bellavista, and M. Magarini, "IIFNet: An Efficient Preamble Detection Approach for 6G and Beyond Networks," under review, *IEEE Network*.

[18] M. Alazab, R. Vinayakumar, S. Srinivasan, **Q.-V. Pham**, S. Venkatraman, Soman KP, and K. Simran, "Deep Learning for Cyber Security Applications: A Comprehensive Survey," under revision, *IEEE Communications Surveys and Tutorials*.

Journal Articles

[1] M. Le, **Q.-V. Pham**, H.-C. Kim, and W.-J. Hwang, "Enhanced Resource Allocation in D2D Communications with NOMA and Unlicensed Spectrum," *IEEE Systems Journal*, in press.

[2] Q. V. Do, **Q.-V. Pham**, and W.-J. Hwang, "Deep Reinforcement Learning for Energy-Efficient Federated Learning in UAV-Enabled Wireless Powered Networks," *IEEE Communications Letters*, in press.

[3] B. M. ElHalawany, E. M. Mohamed, **Q.-V. Pham**, K. Wu, and AAA El-Banna, "Spectrum Sharing in Cognitive-Radio Inspired NOMA Systems under Imperfect SIC and Co-Channel Interference," *IEEE Systems Journal*, in press.

[4] H. Ta, **Q-V. Pham**, K. Ho-Van, and S. W. Kim, "Covert communication with noise and channel uncertainties," *Wireless Networks*, in press.

[5] D. C. Nguyen, **Q.-V. Pham**, P. N. Pathirana, M. Ding, A. Seneviratne, J. Lin, O. A. Dobre, and W.-J. Hwang, "Federated Learning for Smart Healthcare: A Survey," *ACM Computing Surveys*, in press.

[6] M. Alazab, Swarna Priya RM, Parimala M, P. K. R. Maddikunta, T. R. Gadekallu, and Q.-V. Pham, "Federated Learning for Cybersecurity: Concepts, Challenges and Future Directions," *IEEE Transactions on Industrial Informatics*, in press.

[7] W. Wang, F. H. Memon, Z. Lian, H. Xu, T. R. Gadekallu, **Q.-V. Pham**, K. Dev, and C. Su, "Secure-Enhanced Federated Learning for AI-Empowered Electric Vehicle Energy Prediction," *IEEE Consumer Electronics Magazine*, in press.

[8] R. Ruby, **Q.-V. Pham**, K. Wu, A. A. Heidari, H. Chen, and B. M. ElHalawany, "Enhancing Secrecy Performance of Cooperative NOMA-based IoT Networks via Multi-Antenna Aided Artificial Noise," *IEEE Internet of Things Journal*, in press.

[9] H. Yang, R. Ruby, **Q.-V. Pham**, and K. Wu, "Aiding a Disaster Spot via Multi-UAV-based IoT Networks: Energy and Mission Completion Time-Aware Trajectory Optimization," *IEEE Internet of Things Journal*, in press.

[10] P. K. R. Maddikunta, **Q.-V. Pham**, B. Prabadevi, N. Deepa, K. Dev, T. R. Gadekallu, R. Ruby, and M. Liyanage, "Industry 5.0: A Survey on Enabling Technologies and Potential Applications," *Journal of Industrial Information Integration*, in press.

[11] T. R. Gadekallu, **Q.-V. Pham**, D. C. Nguyen, P. K. R. Maddikunta, N. Deepa, B. Prabadevi, P. N. Pathirana, J. Zhao, and W.-J. Hwang, "Blockchain for Edge of Things: Applications, Opportunities, and Challenges," *IEEE Internet of Things Journal*, vol. 9, no. 2, pp. 964-988, Jan. 2022.

[12] S. Ramasubbareddy, S. Ramasamy, K. S. Sahoo, R. L. Kumar, **Q.-V. Pham**, and N.-N. Dao, "CAVMS: Application-Aware Cloudlet Adaption and VM Selection Framework for Multi-Cloudlet Environment," *IEEE Systems Journal*, vol. 15, no. 4, pp. 5098-5106, Dec. 2021.

[13] L. Nkenyereye, L. Nkenyereye, **Q.-V. Pham**, and J. S. Song, "Efficient RSU Selection Scheme for Fog-based Software-Defined Vehicular Network," *IEEE Transactions on Vehicular Technology*, vol. 70, no. 11, pp. 12126-12141, Nov. 2021.

[14] H. Han, J. Zhao, W. Zhai, Z. Xiong, D. Niyato, M. D. Renzo, **Q.-V. Pham**, W. Lu, and K.-Y. Lam, "Reconfigurable Intelligent Surface Aided Power Control for Physical-Layer Broadcasting," *IEEE Transactions on Communications*, vol. 69, no. 11, pp. 7821-7836, Nov. 2021.

[15] T. Huynh-The, **Q.-V. Pham**, T.-V. Nguyen, T. T. Nguyen, R. Ruby, M. Zeng, and D.-S. Kim, "Automatic Modulation Classification: A Deep Architecture Survey," *IEEE Access*, vol. 9, pp. 142950-142971, Oct. 2021.

[16] **Q.-V. Pham**, D. C. Nguyen, S. Mirjalili, H. T. Dinh, D. N. Nguyen, P. N. Pathirana, and W.-J. Hwang, "Swarm Intelligence for Next-Generation Networks: Recent Advances and Applications," *Journal of Network and Computer Applications*, vol. 191, pp. 103141, Oct. 2021.

[17] T. Huynh-The, C.-H. Hua, V.-S. Doan, **Q.-V. Pham**, and D.-S. Kim, "Accurate Deep CNN-based Waveform Recognition for Intelligent Radar Systems," *IEEE Communications Letters*, vol. 25, no. 9, pp. 2938-2942, Sep. 2021.

[18] D. C. Nguyen, M. Ding, **Q.-V. Pham**, P. N. Pathirana, L. B. Le, A. Seneviratne, J. Li, D. Niyato, and H. V. Poor, "Federated Learning Meets Blockchain in Edge Computing: Opportunities and Challenges," *IEEE Internet of Things Journal*, vol. 8, no. 16, pp. 12806-12825, Aug. 2021.

[19] P. K. R. Maddikunta, S. Hakak, M. Alazab, S. Bhattacharya, T. R. Gadekallu, W. Z. Khan, and **Q.-V. Pham**, "Unmanned Aerial Vehicles in Smart Agriculture: Applications, Requirements and Challenges," *IEEE Sensors Journal*, vol. 21, no. 6, pp. 17608-17619, Aug. 2021.

[20] T. Huynh-The, V.-S. Doan, C.-H. Hua, **Q.-V. Pham**, T.-V. Nguyen, and D.-S. Kim, "Accurate LPI Radar Waveform Recognition with CWD-TFA for Deep Convolutional Network," *IEEE Wireless Communications Letters*, vol. 10, no. 8, pp. 1638-1642, Aug. 2021.

[21] L. Nkenyereye, J. Y. Hwang, **Q.-V. Pham**, and J. S. Song, "Virtual IoT Service Slice Functions for Multi-Access Edge Computing Platform," *IEEE Internet of Things Journal*, vol. 8, no. 14, pp. 11233-11248, Jul. 2021.

[22] **Q.-V. Pham**, N. T. Nguyen, T. Huynh-The, L. B. Le, K. Lee, and W.-J. Hwang, "Intelligent Radio Signal Processing: A Survey," *IEEE Access*, vol. 9, pp. 83818-83850, 2021.

[23] B. Prabadevi, N. Deepa, **Q.-V. Pham**, D. C. Nguyen, P. K. R. Maddikunta, T. R. Gadekallu, P. N. Pathirana, and O. Dobre, "Toward Blockchain for Edge-of-Things: A New Paradigm, Opportunities, and Future Directions," *IEEE Internet of Things Magazine*, vol. 4, no. 2, pp. 102-108, Jun. 2021.

[24] L. Nkenyereye, J. Y. Hwang, **Q.-V. Pham**, and J. S. Song, "MEIX: Evolving Multi-Access Edge Computing for Industrial Internet-of-Things Services," *IEEE Network*, vol. 35, no. 3, pp. 147-153, May/Jun. 2021.

[25] M. Zeng, E. B. Mohamed, O. A. Dobre, P. Fortier, **Q.-V. Pham**, and W. Hao, "Energy-Efficient Resource Allocation for IRS-Assisted Multi-Antenna Uplink Systems," *IEEE Wireless Communications Letters*, vol. 10, no. 6, pp. 1261-1265, Jun. 2021.

[26] **Q.-V. Pham**, N. Iradukunda, Nguyen H. Tran, W.-J. Hwang, and S.-W. Chung, "Joint Placement, Power Control, and Spectrum Allocation for UAV Wireless Backhaul Networks," *IEEE Networking Letters*, vol. 3, no. 2, pp. 56-60, Jun. 2021.

[27] N.-N. Dao, **Q.-V. Pham**, N. H. Tu, T. T. Thanh, V. N. Q. Bao, D. S. Lakew, and S. Cho, "Survey on Aerial Radio Access Networks: Toward a Comprehensive 6G Access Infrastructure," *IEEE Communications Surveys and Tutorials*, vol. 23, no. 2, pp. 1193-1225, Second Quarter 2021.

[28] **Q.-V. Pham**, M. Zeng, R. Ruby, T. Huynh-The, and W.-J. Hwang, "UAV Communications for Sustainable Federated Learning," *IEEE Transactions on Vehicular Technology*, vol. 70, no. 4, pp. 3944-3948, Apr. 2021.

[29] C. de Alwis, A. Kalla, **Q.-V. Pham**, P. Kumar, K. Dev, W.-J. Hwang, and M. Liyanage, "Survey on 6G Frontiers: Trends, Applications, Requirements, Technologies and Future Research," *IEEE Open Journal of the Communications Society*, vol. 2, pp. 836-886, Apr. 2021.

[30] N.-N. Dao, **Q.-V. Pham**, D.-T. Do, S. Dustdar, "The Sky is the Edge—Toward Mobile Coverage from the Sky," *IEEE Internet Computing*, vol. 25, no. 2, pp. 101-108, Mar.-Apr. 2021.

[31] N. Iradukunda, **Q.-V. Pham**, M. Zeng, H.-C. Kim, and W.-J. Hwang, "UAV-enabled Wireless Backhaul Networks using Non-Orthogonal Multiple Access," *IEEE Access*, vol. 9, pp. 36689-36698, Jan. 2021.

[32] F. Figueiredo, M. Facina, R. Ferreira, R. Ruby, **Q.-V. Pham**, and G. Fraidenraich, "Large Intelligent Surfaces with Discrete Set of Phase-Shifts Communicating Through Double-Rayleigh Fading Channels," *IEEE Access*, vol. 9, pp. 20768-20787, Jan. 2021.

[33] Luan N. T. Huynh, **Q.-V. Pham**, T.D.T. Nguyen, M.D. Hossain, Y.-R. Shin, and E.-N. Huh, "Joint Computational Offloading and Data-Content Caching in NOMA-MEC Networks," *IEEE Access*, vol. 9, pp. 12943-12954, Jan. 2021.

[34] T.-T. Nguyen, V.-D. Nguyen, **Q.-V. Pham**, and J.-H. Lee, and Y.-H. Kim, "Resource Allocation for AF Relaying Wireless-powered Networks with Nonlinear Energy Harvester," *IEEE Communications Letters*, vol. 25, no. 1, pp. 229-233, Jan. 2021.

[35] J. Tu, H. Chen, J. Liu, A. A. Heidari, X. Zhang, M. Wang, R. Ruby, and **Q.-V. Pham**, "Evolutionary Biogeography-based Whale Optimization Methods with Communication Structure: Towards Measuring the Balance," *Knowledge-based Systems*, vol. 212, pp. 106642, Jan. 2021.

[36] M. J. Piran, **Q.-V. Pham**, S. M. R. Islam, S. Cho, B. Bae, D.-Y. Suh, and Z. Han, "Multimedia Communication over Cognitive Radio Networks from QoS/QoE Perspective: A Comprehensive Survey," *Journal of Network and Computer Applications*, vol. 172, no. 10, pp. 102759, Dec. 2020.

[37] T.-T. Nguyen, **Q.-V. Pham**, V.-D. Nguyen, J.-H. Lee, and Y.-H. Kim, "Resource Allocation for Energy Efficiency in OFDMA-Enabled WPCN," *IEEE Wireless Communications Letters*, vol. 9, no. 12, pp. 2049-2053, Dec. 2020.

[38] F. Fang, Y. Xu, **Q.-V. Pham**, and Z. Ding, "Energy-Efficient Design of IRS-NOMA Networks," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 11, pp. 14088-14092, Nov. 2020.

[39] H.-G. T. Pham, **Q.-V. Pham**, A. T. Pham, and C. T. Nguyen, "Joint Task Offloading and Resource Management in NOMA-based MEC Systems: A Swarm Intelligence Approach," *IEEE Access*, vol. 8, pp. 190463-190474, Oct. 2020.

[40] **Q.-V. Pham**, T. Huynh-The, M. Alazab, J. Zhao, and W.-J. Hwang, "Sum-Rate Maximization for UAV-assisted Visible Light Communications using NOMA: Swarm Intelligence meets Machine Learning," *IEEE Internet of Things Journal*, vol. 7, no. 10, pp. 10375-10387, Oct. 2020.

[41] **Q.-V. Pham**, D. C. Nguyen, T. Huynh-The, W.-J. Hwang, and P. N. Pathirana, "Artificial Intelligence (AI) and Big Data for Coronavirus (COVID-19) Pandemic: A Survey on the State-of-the-Arts," *IEEE Access*, vol. 8, pp. 130820 -130839, Jul. 2020.

[42] R. Vinayakumar, M. Alazab, S. Srinivasan, **Q.-V. Pham**, S. K. Padannayil, and K. Simran, "A Visualized Botnet Detection System based Deep Learning for the Internet of Things Networks of Smart Cities," *IEEE Transactions on Industry Applications*, vol. 56, no. 4, pp. 4436-4456, Jul.-Aug. 2020.

[43] **Q.-V. Pham**, F. Fang, V. N. Ha, M. J. Piran, M. Le, L. B. Le, W.-J. Hwang, and Z. Ding, "A Survey of Multi-Access Edge Computing in 5G and Beyond: Fundamentals, Technology Integration, and State-of-the-Art," *IEEE Access*, vol. 8, pp. 116974-117017, Jun. 2020.

[44] N. Maurice, **Q.-V. Pham**, and W.-J. Hwang, "Online Computation Offloading in NOMA-based Multi-Access Edge Computing: A Deep Reinforcement Learning Approach," *IEEE Access*, vol. 8, pp. 99098-99109, May 2020.

[45] **Q.-V. Pham**, S. Mirjalili, N. Kumar, M. Alazab, and W.-J. Hwang, "Whale Optimization Algorithm with Applications to Resource Allocation in Wireless Networks," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 4, pp. 4285-4297, Apr. 2020.

[46] T. Huynh-The, C.-H. Hua, **Q.-V. Pham**, and D.-S. Kim, "MCNet: An Efficient CNN Architecture for Robust Automatic Modulation Classification," *IEEE Communications Letters*, vol. 24, no. 4, pp. 811-815, Apr. 2020.

[47] **Q.-V. Pham**, Hoang T. Nguyen, Z. Han, and W.-J. Hwang, "Coalitional Games for Computation Offloading in NOMA-Enabled Multi-Access Edge Computing," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 2, pp. 1982-1993, Feb. 2020.

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Languages

VIETNAMESE:	Mother-tongue
ENGLISH:	Fluent
KOREAN:	Basic Knowledge

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